



## ENVIRONMENTAL CONSULTANTS INTERNATIONAL CORPORATION

**ENGINEERING  
PLANNING  
SURVEYING**

June 16, 2005

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**RE: OAKWOOD VILLAGE  
RESPONSE TO PLUS COMMENTS  
ECI PROJECT NO. 04-052**

Dear Ms. Holland:

Thank you for the opportunity to meet with the various State Agency Planners, at your offices on December 1, 2004, to discuss our Oakwood Village project. We have taken the opportunity to review the comments submitted to us via correspondence from your office dated December 17, 2004. As a result of having the opportunity to review those comments, we offer the following responses in a manner consistent with your letter of December 17, 2004.

**Office of State Planning Coordination – Ann Marie Townshend 739-3090**

We understand that the State will not participate in any infrastructure improvements due to this project being within an Investment Level 4 area designated by the Sussex County Comprehensive Plan. It will be the intention of the developer to privately fund the infrastructure associated with the project.

We share your concern with the forested areas on the site. We are providing forested buffers along most of the perimeter of the site and within the project site when possible. In addition, we are providing open-space to the rear of most lots which will be left in a natural state where grading allows.

As discussed at the meeting, the forest associated with the preponderance of this site is of low quality and consists of mostly slash and scrub. There are some specimen trees associated with this forested ground cover. It will be the intention of the developer to preserve those specimen trees where possible. With regard to stormwater management ponds, it is premature, at this point, to specifically identify the requirements for stormwater management on this site. It is further recognized that some ponds may be constructed as a landscape amenity. It will be the intention of the designer of this project to provide quality open-space that affords a natural environment and preserves the overall integrity of the project site. As a part of the planning process, ECI will prepare a Comprehensive Landscape Plan that will address site concern in a logical manner that fully addresses site concerns.

**State Historic Preservation Office (SHPO) – Anne McCleave 739-5685**

As discussed during the meeting, Edward Otter, Ph.D., archeologist, has performed a cultural resources investigation of this site. We have requested Mr. Otter to furnish a copy of his report to the State Historic Preservation Office, to the attention of Ms. Ann McCleave. If this information has not been submitted as of the date of this correspondence, kindly inform this office and we will, again, direct Mr. Otter to forward a copy of same to you.

If during construction of the project any unmarked graves are discovered, we will contact all appropriate agencies in direct accordance with the Delaware Unmarked Human Remains Act.

**Department of Transportation – Bill Brockenbrough 760-2109**

We understand that road improvement costs due to the entrance requirements on Wil King Road will be the responsibility of the developer of this project.

**Comment 1:** The developer of record for this project is aware of the desire by the Department to have stub streets at the locations made a part of the plan review. The developer has considered DelDOT's request and have provided a stub street on Jake Circle.

**Comment 2:** In the final design plans we will provide for the 15' permanent easement along the frontage of the site.

**Comment 3:** Sidewalks and walking paths will be a part of the final design along with street lighting.

**Comment 4:** We will work closely with Mr. Fiori during the design of the entrance plans.

**The Department of Natural Resources and Environmental Control – Kevin Coyle 739-3091**

**General Comment**

As discussed previously in this correspondence, the design of this project and its impact on the forested areas of the project site, has been a prime design consideration in the development of this project. The majority of the forested areas associated with this site are of low quality, consisting of slash and undergrowth. There are, however, specimen trees located throughout the project site that are worthy of preservation. It will be the intention of the developer of the project to preserve these specimen trees and woodlots when possible. With regard to stormwater management ponds, ECI as the project designer, will develop a stormwater management plan for the site that will review the need for stormwater management ponds as a normal part of the engineering associated with the development of the property. In addition, it must be recognized that ponds are sometimes constructed as a landscape amenity. In this case, ECI will develop a Comprehensive Landscape Plan that will fully respect the existing site amenities and enhance them, so as to provide a cohesive, well landscaped plan that minimizes impacts on the natural amenities that occur on site. The location of the lots, along the western edge of the site, are located to maximize open-space and provide access to a larger open-space. The Club House is situated to take full Advantage of site access considerations and good site planning.

**Soils**

We have worked diligently with Ms. Lisa Wood, a soil testing professional to develop the proposed layout of this site. Full consideration to existing soils conditions has been made.

**Wetlands**

We acknowledge your comment concerning the possible presence of palustrine forested wetlands on the site. We have retained the services of a qualified wetland biologist who has made application for Jurisdictional Wetland Delineation for the entire project. It is the intention to acquire a jurisdictional delineation in accordance with the rules and regulations promulgated by the United States Army Corps of Engineers. With regards to vegetative buffers around the edge of wetland complexes, it will be the intention of the developer to adhere to all regulations and laws regarding the development of land adjacent to wetland boundaries. No lots contain any jurisdictional wetlands. Buffers will remain undisturbed except where additional trees and vegetation are added as a result of a proposed landscape plan.

**ERES Waters**

We will implement Best Management Practices during the design of the waste treatment and stormwater design of this project.

### **TMDL's**

The developer of Oakwood Village recognizes the importance of addressing total maximum daily loads (TMDL's) as a method of reducing nutrients to the inland bays water shed. It is the intention of the developer to fully comply with applicable TMDL regulations once promulgated by DNREC, where physically possible.

As of the date of this review, no adoption of the TMDL's/BMP's and Pollution Control Strategy has occurred.

Although we have severe reservations related to the DNREC position regarding TMDL's we feel compelled to offer the following discussion. The current model being used by the DNREC assumes limitations that for forested areas, that when adopted, would prohibit development, regardless of which nutrient reduction zone a project may occur. It is the opinion of the author that the request by the department that a nutrient budget be performed and "should employ relevant scientific defensible assumptions from peer reviewed research conducted in a geologic setting similar to that of the coastal plains of Delaware" is a statement that is higher than that which was used to develop the DNREC model for phosphorus limits and forested area loadings.

That said, this project nor other projects cannot meet the anticipated load reductions set forth by DNREC for the forested areas. However, BMPS will be utilized to reduce loadings of nitrogen and phosphorus from stormwater management. The community wastewater system will have nitrogen and phosphorus removal to minimize the impact to the site. Implementing the BMPS and nutrient removal in the community wastewater system maximizes the extent possible and practicable to meet nutrient impacts.

An argument could be made that with the pending TMDL Strategy, all development in woodlands would cease. However, nothing would prevent the harvesting of woodland to create an environment from which a future reduction in nutrient could be achieved. This sounds self-defeating in an attempt to protect both woodlands and the watershed.

This issue demonstrates how at the boundary limits of the TMDL Strategy the science breaks down and further refinement is necessary to have an effective and implementable Pollution Control Strategy.

### **Water Supply**

We shall comply with all requirements concerning dewatering while the site is being developed. It is anticipated that a public water supply will be utilized to supply potable water to the project site.

### **Sediment and Erosion Control/Stormwater Management**

We, as a normal practice, schedule a pre-design meeting with Sussex Conservation District (SCD) to discuss the aspects of the stormwater management design for the project prior to the commencement of in-depth stormwater management design.

A Notice of Intent (NOI) has been submitted as required.

A Comprehensive Stormwater Management Design will be developed for this project in total. The plan will be designed in a manner consistent with the rules and regulations as promulgated by the Sussex County Conservation District and the State of Delaware. The stormwater management plan will address the situation related to current pre-development hydrology at the site, and will address conveyance of stormwater from adjacent properties that migrate through the project site. The developer recognizes the importance of stormwater management and related aspects associated with the management of post-project hydrology throughout the project site and region. It will be the intention of the developer to cooperate fully with the agencies responsible for stormwater management, to assure that impacts associated with this project will not aggravate existing conditions that currently exist downstream of the project boundary.

### **Drainage**

We will take into consideration the surrounding area and related off-site drainage patterns in the initial stages of our design. The intent of the Project Stormwater Management Plan will be to maximize natural drainage protection and to limit to the extent possible, structural solutions to stormwater management.

### **Forests/Open Space/Revegetation**

While it is true we will be removing a portion of the existing trees on this site, we will be replacing many trees and providing grass lawns where tree cover is not possible or desirable to the rear of almost all lots within the project. This along with landscaped home sites and common areas will improve the conditions on the site. Native plants and trees will be utilized as a part of an overall landscape plan to be developed for this site. As discussed elsewhere in the correspondence, there is a limited amount of quality woodland associated with this project. When possible, woodlands will be preserved and or improved.

### **Nuisance Species**

By virtue of previous experience, Environmental Consultants International Corporation has direct experience in the development of ponds throughout the state of Delaware. ECI is aware that such ponds will attract waterfowl to include Canadian geese and mute swans that can create a nuisance for community residents. ECI, through the use of effective landscape techniques, will

attempt to buffer the areas around the pond so as to preclude the development of resident waterfowl.

### **Recreation**

Sidewalks and paths along with street lighting will be utilized within the design of this community.

The Community Center area shown on the Preliminary Plan you reviewed is conceptual. A more detailed and thorough plan will be developed limiting impervious areas, while meeting Sussex County Planning requirements.

The parking that is shown on the plan, in the vicinity of the community center, has been developed to meet existing code regulations and requirements. It is anticipated that a recreational center/community center will become a focus point in the community, and that most residents hopefully will take advantage of the trail network, sidewalks, etc. to access this facility. Regardless of that fact however, the parking shown is the minimum amount of parking that is acceptable for a facility of this size.

### **Air Quality**

Environmental Consultants International Corporation is aware of the issues related to air quality that development activities bring. It is recognized that the development of housing projects has a direct impact on air quality. The developer of this project is cognizant of these issues and intends to provide energy efficient homes that will require minimal amounts of energy to provide the services one would expect in a housing project of this caliber. With regard to vehicular traffic, the developer is not in a position to control impacts related to emission of vehicles. With regard to electrical power generation, although the development will purchase power, the inhabitants of the residences located within the development have no direct control of the manner in which power is generated within the State of Delaware, or for that matter, elsewhere within the Pennsylvania, New Jersey, Delaware, Maryland grid. It would appear that regulation of the generation facilities should increase appropriately to the environmental issues mandated by the United State Environmental Protection Agency and the state agencies having jurisdiction over such generation facilities. The project, as proposed, provides significant opportunity for the utilization of bicycles and walking throughout the project site.

### **State Fire Marshal Office – Duane Fox 856-5298**

We will comply with all regulations of the State Fire Marshal's office.

**Department of Agriculture – Mark Davis 739-4811**

A Comprehensive Landscape Plan will be developed as part of the design process for this project.

**Public Service Commission – Andrea Mauche – 739-4247**

Tidewater Utilities will be the water company for this project. A wastewater utility company will operate the wastewater treatment plant as required by Delaware State Law.

It is uncertain at this time whether a closed propane system will be integrated in to this design.

**Delaware State Housing Authority**

The developer is keenly aware of the fact that the project site is outside of the Investment Level I and II areas, as outlined in the Delaware State Strategies Map. The existing zoning for the project site is agricultural and allows for the development of single-family home sites. In addition, the zoning for the portion of the site along Wil King Road (CR 288) has a zoning line parallel to the roadway, 450' west of Wil King Road and parallel to same. This zoning district is listed as a general residential district (GR) that specifically allows residential development at a nominal density greater than conventional AR zoning.

**Delaware Emergency Management Agency**

We are aware of your concerns and will contract and coordinate with the appropriate emergency services to include ambulance/police and fire.

**Sussex County – Richard Kautz 855-7878**

We acknowledge your comment concerning cross access of adjacent sites.

The wastewater treatment plant will have a landscaped buffer around the perimeter.

We have revised all lots within the GR zone to be a minimum of 10,000 square foot in area and included the zoning line on the plan.

The wastewater treatment plant will be operated by a Delaware licensed entity. The design and construction of the collection and transmission system will be in accordance with Sussex County Ordinance 38 Standards and Specifications and will be submitted to the Sussex County Engineering Department for approval.

We understand the requirement pertaining to connecting to a Sussex County gravity system should it be available in the future.

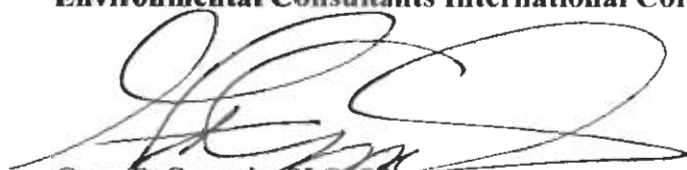
The State of Delaware  
Office of State Planning  
Oakwood Village  
June 16, 2005  
Page 8

It is our pleasure to of had the opportunity for the Comprehensive Review. As you can see, we have incorporated these comments into our plan where feasible.

We hope that these responses and related revisions meet with your approval. If you have any further questions or comments, please don't hesitate to contact me.

Sincerely,

**Environmental Consultants International Corporation**

A handwritten signature in black ink, appearing to read 'G. Cuppels', written over a horizontal line.

Gary T. Cuppels, PL8, PP  
Vice President of Operations